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19. (Amended) A multilayered structure resin molded product comprising a core layer and a skin layer, wherein a coloring component of said skin layer contains a pigment, and wherein when a lightness L^* of said skin layer is not less than 55, a thickness of said skin layer providing an external appearance is defined to be not less than 0.3 mm.

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21. (Amended) A multilayered structure resin molded product comprising a core layer and a skin layer, wherein a portion of said resin molded product has a mounting portion for mounting another part, the whole of said resin molded product has a multilayered structure comprising said core layer and said skin layer, and said mounting portion is formed integrally with the skin layer from the same material as the skin layer.

REMARKS

The claims are 1-15, 19, 21-24 and 26, with claims 1, 4, 6, 8, 11, 12, 15, 19 and 21 being independent. Claims 4-15 and 26 have been withdrawn from consideration as directed to a non-elected invention. Claims 16-18, 20, 25 and 27 have been cancelled. Claims 1 and 2 have been amended to better define the present invention. Support for this amendment may be found throughout the specification and the drawings. Claim 19 has been amended to incorporate the features of cancelled claim 20 and to improve its form.

Claim 21 has been amended for clarification. No new matter has been added.

Reconsideration of the claims is expressly requested.

The drawings are objected to by the Examiner. These objections have been addressed as follows.

With respect to a typographical error in Fig. 3, submitted herewith is a Request for Approval of Drawing Changes together with proposed drawings, which correct this typographical error.¹

With respect to reference characters T1-T3, which appear in Figs. 5, 8, 9 and 12, Fig. 5 and the specification have been amended to change these characters to T_i-T_{iii}, respectively, in order to distinguish the references to time from the references to thickness.

With respect to reference numeral 1, Figs. 1 and 2 have been amended to include this reference numeral.

With respect to reference numerals 86 and 127 in Fig. 4, the specification has been amended to replace "86" with --127-- to correctly reflect the structure in Fig. 4.

With respect to C in Fig. 13, the Examiner will note that this reference numeral represents the direction along which the cross-sectional structure is shown in Fig. 14, as indicated in the specification at page 14, lines 12-13.

With respect to T4 and t4 in Fig. 14, the specification has been amended to provide a description of the features represented by these reference characters.

Accordingly, Applicants request withdrawal of the drawing objections.

Claims 21-25 and 27 stand rejected under 35 U.S.C. § 112, second paragraph, as being allegedly indefinite.

¹/These proposed drawings include all changes to the drawings discussed in this Amendment.

Applicants have amended claim 21 to address the Examiner's concerns and cancelled claims 25 and 25. Accordingly, this rejection should be withdrawn.

Claims 1, 2, 16, 18, 21, 22, 24, 25 and 27 stand rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by U.S. Patent No. 4,546,022 (Madonia), as evidenced by U.S. Patent No. 4,493,806 (Hatzikelis). Claim 3 stands rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by, or in the alternative under 35 U.S.C. § 103(a) as being allegedly obvious from, Madonia, as evidenced by Hatzikelis. Claims 19 and 20 stand rejected under 35 U.S.C. § 103(a) as being allegedly obvious from Madonia, as evidenced by U.S. Patent Nos. 4,448,608 (Jenkins) and 5,508,060 (Perman). Claim 17 stands rejected under 35 U.S.C. § 103(a) as being allegedly obvious from U.S. Patent No. 4,023,896 (Koch) in view of Madonia. Claim 23 stands rejected under 35 U.S.C. § 103(a) as being allegedly obvious from Madonia in view of U.S. Patent No. 5,702,148 (Vaughan). The grounds of rejection are respectfully traversed.

Claims 1-3 are patentable over Madonia, viewed alone or together with Hatzikelis.

The Examiner has alleged that Madonia teaches an external part and a housing part, because the molding is applied to the exterior of the automobile, which is both an external part and a housing part. The Examiner used the teachings of Hatzikelis to show a process for obtaining a recycled plastic of the housing part.

The Examiner will note that in Hatzikelis, a the plastic is cooled (chilled) before being pulverized in order to avoid removing impurities from the recycled plastic after it is pulverized. As can be clearly seen from the discussion in the subject

specification at page 16, line 11, through page 18, line 1, and in Fig. 4, the resin in the present invention is not subjected to a cooling process prior to being pulverized. The absence of a cooling step in the present invention is further substantiated by the presence of an impurity separation process and the apparatus configured to carry out this function, as described on page 17 and shown in Fig. 4.

The Examiner will note that Hatzikelis explicitly teaches that plastic, which is chilled prior to being pulverized, is not thereafter decontaminated. Applicants respectfully submit that this reference is directed to avoiding a step of removing contaminants.

Cooling the resin material at any point prior to injection molding to form a multilayered structure of the present invention deteriorates the resin material. Thus, the resin material in the present invention is clearly different from the plastic disclosed in Madonia via the process in Hatzikelis, because this plastic is substantially chilled prior to being pulverized. Accordingly, the multilayered structure resin molded product in claims 1-3 is clearly patentable over Madonia and/or Hatzikelis.

With respect to claims 16-18, since these claims have been cancelled, all rejections of these claims are moot and should be withdrawn.

With respect to claim 19, Madonia discloses a molded article in which an external part has a thickness of 0.1525 mm to 0.305 mm. Since the internal part in Madonia is not colored and the external part is colored, the internal part cannot affect the color of the article irrespective of the small thickness of the external part.

The Examiner will appreciate that if the internal part is colored, this color affects the color of the exterior of the article. Specifically, if the internal part is dark and

the external part is light, the thickness of the external part will determine the extent of the internal part's influence.

In claim 19, while the external part of the article is light (not less than 55), the influence of the interior on appearance is controlled by setting the thickness of a portion of the skin layer that provides the external appearance to at least 0.3 mm. Accordingly, it is clear that using a skin layer having a color and a thickness of its appearance-providing portion as presently claimed would not have been obvious in view of Madonia.

As discussed above, Madonia is not concerned with maintaining the desired appearance of the article, because it only discloses a non-colored interior. This reference cannot possibly teach the presently claimed thickness of an appearance-providing portion of the skin layer when the skin layer is as light as presently claimed. Therefore, claim 19 is patentable over Madonia, Jenkins and Perman.²

With respect to claim 21, this claim has been amended to clarify that the mounting portion is integrally formed with the skin layer and is made of the same material as the skin layer. This integral structure results in the article having superior strength.

Madonia discloses adhesive mounting strips that are provided for applying the molding. However, it is clear from Fig. 3 of Madonia that this adhesive is not a mounting portion integrally formed with the skin layer and made of the same material as the skin layer. The Examiner's interpretation as to what portion of the structure in Madonia represents a skin layer necessarily precludes identifying an adhesive layer as a mounting portion as presently claimed.

²/Jenkins and Perman were cited for the disclosure of the color scale and are therefore unable to provide the teaching regarding controlling the outside appearance that is missing in Madonia.

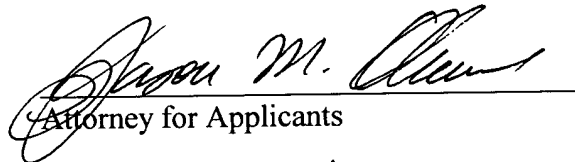
Vaughan cannot provide the teaching missing in Madonia. Specifically, the Examiner cited Vaughan to show that an adhesive and a screw are known in the art as equivalent attaching portions. Even if assumed, arguendo, that the Examiner's interpretation of Vaughan is correct, this reference lacks the same teaching regarding the integrally formed mounting portion that is lacking in Madonia.

In conclusion, Applicants respectfully submit that the cited references, whether considered separately or in any combination, do not disclose or suggest a combination of elements as presently claimed.

Wherefore, Applicants respectfully requests that all rejections be withdrawn and that the present case be passed to issue.

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our address given below.

Respectfully submitted,


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APPENDIX

Application No. 09/897,014
Attorney Docket No. 00862.022294

IN THE SPECIFICATION:

The paragraph at page 17, lines 21-23, has been amended as follows:

The pulverized resin material thus classified is passed through a magnetic selector 84 and supplied to a stock tank 88 by a blower 127 [86].

The paragraphs at page 19, lines 4-11, have been amended as follows:

As shown in FIG. 5, in the first injection step, a predetermined resin amount Q1 of the skin layer resin material is injected within a predetermined time T_1 [T1] from the plasticizing means 42.

Subsequently, in the second injection step, a volume Q2 of the skin layer resin material and a volume P1 of the core layer resin material are simultaneously injected within a predetermined time T_2 [T2].

The paragraph at page 19, lines 19-22, has been amended as follows:

Following the second injection step, a predetermined amount Q3 of the skin layer resin material is injected within a predetermined time T_3 [T3] in the third step.

The paragraph at page 24, lines 3-7, has been amended as follows:

To decrease the thickness of a nearby portion around a portion of a plane board from which the screw connecting portion 104 extends, a cavity for forming the board

100 is narrowed to prevent inflow of the core layer resin material. The thickness of the board 100 is represented by T4 and the thickness around the portion of the board 100 from which the screw connecting portion 104 extends is represented by t4.

IN THE CLAIMS:

Claims 16-18, 20, 25 and 27 have been cancelled.

Claims 1, 2, 19 and 21 have been amended as follows:

1. (Amended) A multilayered structure resin molded product comprising a core layer and a skin layer, wherein said resin molded product is injection molded using a pulverized resin material, which is formed by pulverizing a molded product molded from a thermoplastic resin material, as a resin material for forming said core layer, and a virgin material as a resin material for forming said skin layer.

2. (Amended) The product according to claim 1, wherein said resin molded product is a part selected from the group consisting of an external part, housing part, and constituent part of an apparatus selected from the group consisting of an office apparatus, electric apparatus, and information communication apparatus, and wherein a main component of a resin material of the core layer and a main component of a resin material of the skin layer are chemically the same resin.

19. (Amended) A multilayered structure resin molded product comprising a core layer and a skin layer, wherein a coloring component of said skin layer

contains a pigment, and wherein when a lightness L^* of [a resin molded portion of] said skin layer is not less than 55, a [the] thickness of [a surface portion of] said skin layer providing an external appearance [resin molded portion] is defined to be not less than 0.3 mm.

21. (Amended) A multilayered structure resin molded product comprising a core layer and a skin layer, wherein a portion of said resin molded product has a mounting portion for mounting another part, the whole of said resin molded product has a multilayered structure comprising said core layer and said skin layer, and said mounting portion is formed integrally with the skin layer from the same material as the skin layer [made of a skin layer resin material].

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